

REMARKS

Applicants thank the Examiner for the thorough review of the application.

Claims 1-39 were pending. In the Office Action dated March 12, 2003, the Examiner withdrew claims 9, 11-13, 17, and 22-39 from consideration based on Applicants' election of Group I, claims 1-8, 10, 14-16, and 18-21, and SEQ ID NO:30 encoding SEQ ID NO:31, without traverse, and rejected claims 1-8, 10, 14-16, and 18-21. Applicants have herein cancelled claims 1-39 and added claims 40-77. Accordingly, claims 40-77 are pending.

Claims 40, 55, 56, and 57 are independent claims and are directed to isolated nucleic acids. Claims 54, 63, 71, and 76 are directed to methods for producing transgenic plants comprising the claimed isolated nucleic acids. Support for these claims and their associated dependent claims can be found throughout the specification, e.g., at page 48 starting at line 20, page 49 at line 15, page 50 at line 2, page 57 starting at line 25, and page 58 at line 3.

Better quality representations of Figures 6A and 6B are attached and are submitted to replace existing Figures 6A and 6B. Applicants have amended page 12, line 2, page 50, line 21, page 51, line 18, and page 52, line 16 by deleting the embedded hyperlinks therein. Other amendments to the specification are made to fix typographical errors and to conform one part of the specification to another part. No new matter has been added by these amendments.

In light of the above and in view of the following remarks, Applicants respectfully request consideration and allowance of claims 40-77.

Objections

The Examiner objected to claim 1 for reading on non-elected inventions. Claim 1 has been cancelled, thereby mooting the objection. Presently pending claims read on the elected invention of Group I.

The Examiner has objected to the claims for not incorporating SEQ ID NO's when referring to nucleic acid or amino acid sequences. Claims 1-39 have been cancelled, thereby mooting the objection. The new claims include SEQ ID NO's where required.

Applicants respectfully request that the Examiner withdraw these objections.

Rejections under 35 U.S.C. § 112, 2nd paragraph

The Examiner rejected claims 1-8, 10, 14-16, and 18-21 as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. More specifically, the Examiner required clarification or correction regarding terms in various claims such as "at least about", "complement", "phenotype", and "altered." Claims 1-39 have been cancelled, thereby mooted the rejection. The presently pending claims do not recite such terms. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection as applied to the presently pending claims.

Rejections under 35 U.S.C. § 112, 1st paragraph

Written Description

The Examiner rejected claims 1-8, 10, 14-16, and 18-21 as containing subject matter which was not described in the specification in such a way as to reasonably convey one skilled in the relevant art that the inventor(s), at the time of the application was filed, had possession of the claimed invention. Specifically, the Examiner objected to the previous claims as reciting fragments of sequences that exhibit 50% sequence identity to a *dwf5-1* and sequences comprising as little as 15 contiguous base pairs of a *dwf5-1* polynucleotide. Without acquiescing in the rejection, Applicants have herein cancelled these claims, thereby mooted the rejection. Presently pending claims 40-77 do not recite such fragments and are believed to have proper written description in the specification. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 112, 1st paragraph.

Enablement

The Examiner rejected claims 1-8, 10, 14-16, and 18-21 as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. In particular, the Examiner asserted that it would take undue experimentation for one of skill in the art to practice the invention recited in the prior claims, e.g., claims reciting fragments of sequences that exhibit 50% sequence identity to a *dwf5-1* polynucleotide and sequences comprising as little as 15 contiguous base pairs of a *dwf5-1*

polynucleotide. The Examiner also asserted that Applicants had not taught how one skilled in the art would use the polynucleotides to generate a specific agronomically important plant or to achieve an altered phenotype. Without acquiescing in the rejection, Applicants have herein cancelled these claims, thereby mooting the rejection. The presently pending claims do not recite such fragments nor do they recite a plant having an altered phenotype. Presently pending claims 40-77 are directed at isolated nucleic acids, coding sequences, and transgenic plants enabled by the present specification. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection under 35 U.S.C. § 112, 1st paragraph.

Rejections under 35 U.S.C. § 102

The Examiner rejected claims 1-8 and 10 under 35 U.S.C. § 102(b) as being anticipated by Chenivresse *et al.* More specifically, the Examiner asserted that Chenivresse *et al.* teach a nucleotide sequence that comprises around 220 base pairs that are 100% identical to SEQ ID NO:30, and that, because the claims recited various types of fragments of sequences, such as those exhibiting 50% sequence identity to *dwf5-1* and sequences comprising as little as 15 contiguous base pairs of a *dwf5-1* polynucleotide, the claims would be anticipated by Chenivresse. Without acquiescing in the rejection, Applicants have cancelled these claims, thereby mooting the rejection. Presently pending claims 40-77 do not recite such fragments and are not taught or suggested by Chenivresse. Accordingly, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 102.

Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1-8, 10, 14-16, and 18-21 under 35 U.S.C. § 103(a) as being unpatentable over Chenivresse *et al.* and further in view of the method taught by Metz *et al.* The Examiner referred to the claimed method as one producing a transgenic plant having an altered phenotype. In addition, the Examiner asserted that it have been *prima facie* obvious to one skilled in the art at the time the invention was made to express the polynucleotide of Chenivresse *et al.* in a plant using the method of Metz *et al.* for heterologous protein expression or enzyme expression.

Applicant : Sunghwa Choe et al.
Serial No. : 09/817,774
Filed : March 26, 2001
Page : 15 of 15

Attorney's Docket No.: 11696-071001
Client Ref. No.: 2008-55300-US-U-00003.01

Without acquiescing in the rejection, Applicants have herein cancelled these claims, thereby mooting the rejection. As indicated above, Chenivresse *et al.* does not teach or suggest presently pending claims 40-77. Metz *et al.* does not cure the deficiencies of Chenivresse. Metz *et al.* discloses a construct involved in fatty acid biosynthesis operably linked to a napin promoter. At no point, however, does Metz *et al.*, either alone or in combination with Chenivresse, teach or suggest the isolated nucleic acids, transgenic plants, or coding sequences recited in presently pending claims 40-77. Accordingly, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 103.

Conclusion

In light of the above, Applicants respectfully request consideration and allowance of claims 40-77.



Appln No.: 09/817,774
Applicant(s): Sunghwa Choe et al.
DWF5 MUTANTS

RECEIVED
AUG 25 2003
TECH CENTER 1600/2900

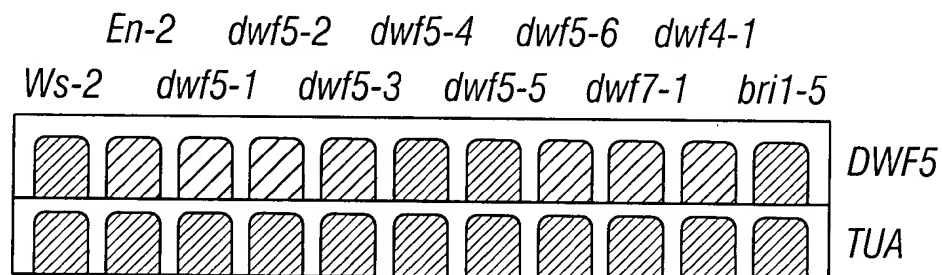


FIG. 6A

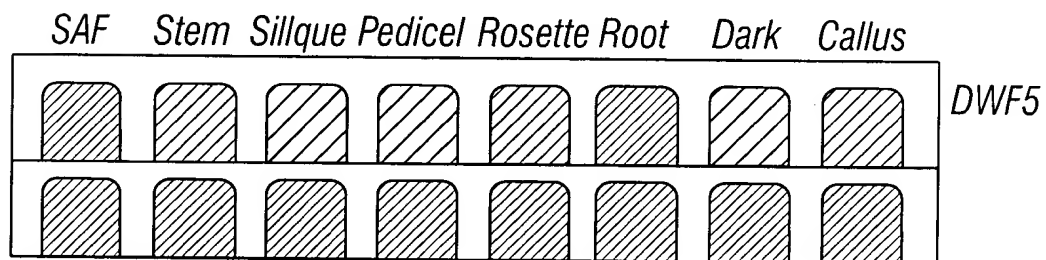


FIG. 6B